

*Annual Supplement*

PROJECT # 2510

PROJECT TITLE: Variable-Frequency Audio Oscillator, IN-1

NO CHANGE

This document is part of an integrated  
file. If separated from the file it must be  
subjected to individual systematic review.

NO CHANGE

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The major requirements on this oscillator consist of compactness, (package dimensions sought are 1" X 2" X 3"), a simple, easily read frequency indicator having a resettability error low enough to be consistent with the required calibration accuracy of 10% at the low end and 5% at the high end, and frequency stability of 5% over the temperature range from 0°C to 50°C. To obtain the best compromise between the above requirements, three prototype models have been constructed and evaluated. Physical dimensions present the toughest problem primarily because of the size of the smallest suitable frequency determining potentiometer and the ruggedness required in the case and mounting arrangement to maintain the gear train alignment and backlash characteristics required for acceptable resettability.

Evaluation of the IN-1 has established its electrical characteristics to be within the specifications outlined above. Its dimensions are 1 $\frac{1}{4}$ " X 2  $\frac{7}{8}$ " X 5". A much smaller potentiometer has recently become available, the use of which would result in some size reduction: however, [REDACTED] ILLEGIB

[REDACTED] ILLEGIB  
[REDACTED] it is believed that the size reduction achieved will not justify the cost of redesign for a nine unit requirement. ILLEGIB



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Construction of nine units based on the present prototype.

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unclassified